

# DRAWER HAVING OUTSTANDING OUTER APPEARANCE

## BACKGROUND OF THE INVENTION

### 1. Field of the Invention

The present invention relates to a drawer, and more particularly to a  
5 drawer having an outstanding outer appearance.

### 2. Description of the Related Art

A conventional drawer is made of wood or metal material and is  
provided with a single color or pattern by painting or plating. However, the  
conventional drawer has a monotonous outer appearance without variation,  
10 thereby decreasing the aesthetic quality of the conventional drawer.

## SUMMARY OF THE INVENTION

The primary objective of the present invention is to provide a drawer  
having an outstanding outer appearance.

Another objective of the present invention is to provide a drawer,  
15 wherein the heat transfer layer is directly heat transferred onto the  
thermoplastic layer and is combined with the thermoplastic layer integrally, so  
that the combined thermoplastic layer and heat transfer layer present an  
outstanding outer appearance so as to enhance the aesthetic quality of the  
drawer.

20 In accordance with the present invention, there is provided a drawer,  
comprising:

a thermoplastic layer; and

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a heat transfer layer mounted on an outer surface of the thermoplastic layer.

Further benefits and advantages of the present invention will become apparent after a careful reading of the detailed description with appropriate  
5 reference to the accompanying drawings.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

Fig. 1 is an exploded perspective view of a drawer in accordance with the preferred embodiment of the present invention;

Fig. 2 is a perspective assembly view of the drawer in accordance  
10 with the preferred embodiment of the present invention; and

Fig. 3 is a partially cut-away plan cross-sectional view of the drawer as shown in Fig. 2.

### **DETAILED DESCRIPTION OF THE INVENTION**

Referring to the drawings and initially to Figs. 1 and 2, a drawer in  
15 accordance with the preferred embodiment of the present invention comprises a thermoplastic layer 10, and a heat transfer layer 11 mounted on an outer surface of the thermoplastic layer 10. Preferably, the heat transfer layer 11 is integrally combined with the outer surface of the thermoplastic layer 10.

In practice, the drawer comprises a rectangular bottom plate 20, and  
20 four side plates 22 surrounding the bottom plate 20 to form a receiving space. The thermoplastic layer 10 is mounted on the bottom plate 20 and the side plates 22. Preferably, the bottom plate 20 is integrally formed with the

thermoplastic layer 10 and the side plates 22 are also integrally formed with the thermoplastic layer 10. Thus, the thermoplastic layer 10 forms an outer surface of the bottom plate 20 and the four side plates 22 of the drawer.

In practice, the thermoplastic layer 10 forms a micro-pore structure.

5 Thus, when the thermoplastic layer 10 touches a heat source, the gaps between the molecules of the thermoplastic layer 10 are opened to a determined extent, and when the temperature is reduced to the normal state, the gaps between the molecules of the thermoplastic layer 10 are contracted to return to the original state.

10 The heat transfer layer 11 is directly heat press transferred onto the thermoplastic layer 10 and has a surface provided with plurality of patterns. In practice, the heat transfer layer 11 is printed on a film 110 made of heat resistant material. After the heat transfer layer 11 is heat press transferred onto the thermoplastic layer 10, the film 110 is removed from the heat transfer layer  
15 11.

As shown in Fig. 3, when the heat transfer layer 11 is heat press transferred onto the thermoplastic layer 10, the thermoplastic layer 10 is heated and the gaps between the molecules of the thermoplastic layer 10 are opened to a determined extent to bond the abutting surface of the heat transfer layer 11  
20 closely and tightly, so that the heat transfer layer 11 is entirely attached on the surface of the thermoplastic layer 10. When the temperature is reduced to the normal state, the gaps between the molecules of the thermoplastic layer 10 are

contracted to return to the original state, so that the heat transfer layer 11 is integrally combined with the thermoplastic layer 10 rigidly and stably.

Accordingly, the heat transfer layer 11 is heat press transferred onto the thermoplastic layer 10 and is combined with the thermoplastic layer 10  
5 integrally, so that the combined thermoplastic layer 10 and heat transfer layer 11 present an outstanding outer appearance so as to enhance the aesthetic quality of the drawer.

Although the invention has been explained in relation to its preferred embodiment(s) as mentioned above, it is to be understood that many other  
10 possible modifications and variations can be made without departing from the scope of the present invention. It is, therefore, contemplated that the appended claim or claims will cover such modifications and variations that fall within the true scope of the invention.